

Claims

WE CLAIM:

1. A method for harvesting forage crops with a harvester comprising a processing unit and a pickup header, the pickup header including at least one pair of augers situated
5 one above another, the at least one pair of augers being on at least one side of the pickup unit and rotating on axes substantially parallel to a pickup header axis, the pickup header being wider than a width of the processing unit, the method comprising:
 - (a) picking up the forage crop with the pickup header;
 - (b) transferring the forage crop towards the processing unit in a direction
10 substantially perpendicular to the pickup header axis; and
 - (c) directing the forage crop in the pickup header outside the width of the processing unit toward a middle of the pickup header with the at least one pair of augers.
- 15 2. The method of claim 1, the pickup header additionally comprising teeth, the method also comprising using a laid back tooth having an angle measured between itself and a radial line passing through the pickup header axis and a base of the laid back tooth greater than teeth having other characteristics in the pickup header.
- 20 3. The method of claim 2 wherein the laid back teeth are used in a region of the pickup header that sweeps under the at least one pair of augers.
4. The method of claim 1, the pickup header additionally comprising teeth, the method also comprising using a heavy tooth having a rigidity such that a force of at
25 least 45 lb_f is required to deflect said heavy tooth an angle of 41°.
5. The method of claim 4 wherein the heavy teeth are used in a region of the pickup header inside ends of the at least one pair of augers.

6. The method of claim 1, the pickup header additionally comprising teeth, the method also comprising using teeth having a plurality of characteristics comprising:

- 5 (a) a laid back tooth having an angle measured between itself and a radial line passing through the pickup header axis and a base of the laid back tooth greater than teeth having other characteristics in the pickup header; and
- (b) a heavy tooth having a rigidity such that a force of at least 45 lb_f is required to deflect said heavy tooth an angle of 41°.

10 7. The method of claim 1 wherein a rotational speed of one auger of the at least one pair of augers is not the same value as a rotational speed of the other auger.

8. An apparatus for crop processing having a processing width defined by a distance between a left side and a right side of a processing unit, the apparatus

15 comprising:

- (a) a pickup header that is wider than said processing width; and
- (b) a pair of augers on at least one of a right side and a left side of the pickup header to move crop material laterally.

20 9. The apparatus of claim 8 additionally comprising teeth in the pickup header, said teeth comprising a laid back tooth having an angle measured between itself and a radial line passing through the pickup header axis and a base of the laid back tooth greater than teeth having other characteristics in the pickup header

25 10. The apparatus of claim 9 wherein the laid back teeth are used in a region of the pickup header that sweeps under the at least one pair of augers.

11. The apparatus of claim 8 additionally comprising teeth in the pickup header, said teeth comprising a heavy tooth having a rigidity such that a force of at least 45 lb_f is required to deflect said heavy tooth an angle of 41°.

5 12. The apparatus of claim 11 wherein the heavy teeth are used in a region of the pickup header inside ends of the at least one pair of augers.

13. The apparatus of claim 8, the pickup header additionally comprising teeth comprising:

- 10 (a) a laid back tooth having an angle measured between itself and a radial line passing through the pickup header axis and a base of the laid back tooth greater than teeth having other characteristics in the pickup header; and
- (b) a heavy tooth having a rigidity such that a force of at least 45 lb_f is
- 15 required to deflect said heavy tooth an angle of 41°.

14. The apparatus of claim 8 additionally comprising means to make a rotational speed of one auger of the at least one pair of augers different from a rotational speed of the other auger.

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15. The apparatus of claim 8 wherein said pickup header is located at a same position, relative to an axis of rotation of a wheel, as a pickup header that is a same width as the processing width.

25 16. The apparatus of claim 8 wherein the apparatus for crop processing is a large round baler.

17. The method of claim 1 additionally comprising the step of locating said pickup header at a same position, relative to an axis of rotation of a wheel, as a pickup header that is a same width as the width of the processing unit.